

AMENDMENTS TO THE CLAIMS

This listing of Claims shall replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A timer circuit comprising:

an output stage coupled to a configurable delay element, wherein said configurable delay element comprises a plurality of selectively-activated components operable to adjust a delay through said timer circuit; and

a pull-down path coupled to said output stage and comprising a first circuit for providing a selectable amount of pull down current, wherein said first circuit comprises a plurality of individually-configured components, wherein said plurality of selectively-activated components are of a different component type than said plurality of individually-configured components ~~of said first circuit for providing a selectable amount of pull down current~~, said pull-down path further comprising a second circuit for varying said delay through said timer circuit based upon temperature, wherein said second circuit is operable to vary said delay based upon a reference signal, and wherein said delay ~~that~~ is inversely proportional to said temperature.
2. (Original) A timer circuit as described in Claim 1 wherein said reference signal is derived from a band gap reference circuit.

3. (Currently Amended) A timer circuit as described in Claim 1, wherein said plurality of individually-configured components of said ~~second~~ first circuit are placed in a fixed state during manufacturing.

4. (Previously Presented) A timer circuit as described in Claim 1 wherein said plurality of selectively-activated components comprise a plurality of gated capacitors which can be selectively coupled to said output stage via a plurality of corresponding pass gates.

5. (Original) A timer circuit as described in Claim 4 wherein said configurable delay element further comprises a plurality of configuration bits each for controlling a respective pass gate.

6. (Currently Amended) A timer circuit as described in Claim 1, wherein said ~~first circuit for providing a selectable amount of pull down current comprises~~ plurality of individually-configured components comprise a plurality of gated pull-down circuits coupled in parallel, and wherein each gated pull-down circuit comprises a first transistor having a gate controlled by a respective configuration bit and a series coupled second transistor having a gate controlled by said reference signal.

7. (Currently Amended) A timer circuit as described in Claim 4, wherein said ~~first circuit for providing a selectable amount of pull down current comprises~~ plurality of individually-configured components comprise a plurality of gated pull-

down circuits coupled in parallel, and wherein each gated pull-down circuit comprises a first transistor having a gate controlled by a respective configuration bit and a series coupled second transistor having a gate controlled by said reference signal.

8. (Previously Presented) A timer circuit as described in Claim 6 wherein said plurality of selectively-activated components comprise a plurality of gated capacitors which can be selectively coupled to said output stage via a plurality of corresponding pass gates.

9. (Original) A timer circuit as described in Claim 8 wherein said configurable delay element further comprises a plurality of configuration bits each for controlling a respective pass gate.

10. (Currently Amended) An electronic device comprising a timer circuit and wherein said timer circuit comprises:

an output stage coupled to a configurable delay element, wherein said configurable delay element comprises a plurality of selectively-activated components operable to adjust a delay through said timer circuit; and

a pull-down path coupled to said output stage and comprising a first circuit for providing a selectable amount of pull down current, wherein said first circuit comprises a plurality of individually-configured components, wherein said plurality of selectively-activated components are of a different component type than said plurality of individually-configured components of said first circuit for providing a

~~selectable amount of pull-down current~~, said pull-down path further comprising a second circuit for varying said delay through said timer circuit based upon temperature, wherein said second circuit is operable to vary said delay based upon a reference signal, wherein said delay ~~that~~ is inversely proportional to said temperature, and wherein said reference signal is derived from a band gap reference circuit.

11. (Original) An electronic device as described in Claim 10 wherein said reference signal is a VPTAT voltage signal.

12. (Previously Presented) An electronic device as described in Claim 10 wherein said plurality of selectively-activated components comprise a plurality of gated capacitors which can be selectively coupled to said output stage via a plurality of corresponding pass gates.

13. (Currently Amended) An electronic device as described in Claim 10, wherein said ~~first circuit for providing a selectable amount of pull-down current~~ ~~comprises~~ plurality of individually-configured components comprise a plurality of gated pull-down circuits coupled in parallel, wherein each gated pull-down circuit comprises a first transistor controlled by a respective configuration bit and a series coupled second transistor having a gate controlled by said reference signal.

14. (Previously Presented) An electronic device as described in Claim 13 wherein said plurality of selectively-activated components comprise a plurality of gated capacitors which can be selectively coupled to said output path via a plurality of corresponding pass gates.

15. (Original) An electronic device as described in Claim 10 wherein said electronic device is a memory circuit.

16. (Original) An electronic device as described in Claim 10 wherein said electronic device is a write back timer of a memory circuit.

17. (Currently Amended) A method of varying a delay of a timer circuit comprising:

during configuration of said timer circuit, setting a first plurality of configuration bits which control the amount of elements coupled to an output stage of said timer circuit to set an amount of delay through said timer circuit;

during said configuration, setting a second plurality of configuration bits which control an amount of pull down current through a pull down path of said timer circuit to set an amount of delay through said timer circuit, said pull down path coupled to said output stage, wherein said pull down path comprises a plurality of individually-configured components, and wherein each of said plurality of individually-configured components corresponds to a respective configuration bit of said plurality of configuration bits; and

during operation of said timer circuit, varying said delay of said timer circuit in response to a varying of a reference signal, wherein ~~said varying said delay of said timer circuit comprises varying said delay~~ is inversely proportional to a temperature of said timer circuit.

18. (Original) A method as described in Claim 17 wherein said reference signal is generated by a band gap circuit and varies proportionally with said temperature.

19. (Currently Amended) A method as described in Claim 18 wherein said ~~pull-down path comprises~~ plurality of individually-configured components comprise a plurality of parallel coupled pull down circuits, each pull down circuit comprising a first transistor coupled to a respective configuration bit of said second set of configuration bits and a second transistor having a gate coupled to said reference signal.

20. (Original) A method as described in Claim 19 wherein said elements are gated capacitors which can be selectively coupled to said output stage based on said first set of configuration bits.